

REVIVE KERALA 2020

Rehabilitation and recovery program
Covid -19 pandemic

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INTRODUCTION

It all happened in the blink of an eye, to put it metaphorically. Suddenly a virus made its home in the body of thousands of people around the world. The novel Corona virus started its journey from the city of Wuhan, China, according to official sources on December 31st 2019, which is why it is named as covid-19. On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Although for most people COVID-19 causes only mild illness, it can make some people very ill. More rarely, the disease can be fatal. Older people, and those with pre-existing medical conditions (such as high blood pressure, heart problems or diabetes) appear to be more vulnerable. The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in the air, and quickly fall on floors or surfaces. This project is going to emphasis on the life after covid-19 in Kerala, India. The state has received both national and international recognition for its efforts to contain the Coronavirus pandemic.

A recent study found out some major health concerns of the people who were affected both physically and emotionally. A large number of seriously ill coronavirus patients who survive and leave the hospital are facing a new and difficult challenge: Recovery. They are continuing to struggle with the residual symptoms even after discharge and some may persist for a long period of time. Lying in a hospital bed for such a long time has given rise to muscle weakness, fatigue, confusion and mental foggiess because the experience of being extremely sick and alone amplifies the trauma. It's really common for patients to have PTSD after going through this — nightmares, depression and anxiety because they're having flashbacks and remembering what happened. Another factor that can extend or hamper recovery is a phenomenon called hospital delirium, a condition that can involve paranoid hallucinations and anxious confusion. It is more likely to occur in patients who undergo prolonged sedation, have limited social interaction and are unable to move around — all common among COVID-19 patients.

Also people are facing anxiety issues due to the social restrictions, many have lost their job and quarantine guidelines has made people emotionally drown. Returned emigrants from different parts of the world especially from gulf countries have even lost their livelihood and are at the verge of despair. So to deal with such variety of issues everything has to be done just right since the emotional and physical health of our people are equally important.

BUSINESS CASE

The need of a well organised system that can bring back people to their normal life and ensure mental support has now become necessary. Rehabilitation is the process of helping an individual achieve the highest level of function, independence, and quality of life possible. It helps the person to develop and utilize their full potential through a process of learning and support from the environment which can in turn bring back the individual back in to their own community. This does not reverse the damage caused by the disease but rather helps restore the individual to optimal health. There are a lot of rehabilitation centres in our state but we need to especially concentrate on those people who are affected by the pandemic. So the main objective of this dissertation will be to create a recommender system for a suitable location to set up the main branch of “REVIVE” in Kerala, India, which is a part of the rehabilitation and recovery program. It would be suitable to choose a location near hospitals so that supporting facilities can be shared and a multi -disciplinary approach can be adopted for maximum profit.

Problem Statement:

Using Data Science methodology and machine learning algorithms this dissertation comes up with a solution for the business question:

“If a health professional or an investor is looking to open a rehabilitation centre especially due to the covid -19 pandemic, in Kerala, India, where would you recommend them to open it?”

Target Audience:

This project is particularly useful to property developers, investors, medical professionals, government officials etc. After the accomplishment of this project a group or perfect team of physicians, specially trained therapists, and nurses as well as psychologists, nutritionists, biomedical engineers are likely to be increasingly in demand. Since we are taking the hotspots and containment zones declared by the Government of Kerala, as the main matter of concern the recovered patients from there and also the emotionally affected ones can be benefitted through this.